



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, DC 20460

OFFICE OF CHEMICAL SAFETY  
AND POLLUTION PREVENTION

January 12, 2018

Kate Ingram  
Sr Product Reg Specialist  
Solenis LLC  
701 Market Street Suite 111 Box 112  
St. Augustine, FL 32095

Subject: Label Amendment – Minor edits, change “should” to “must”, revise First Aid statement, add Lot Number  
Product Name: Biosperse 244M Microbiocide  
EPA Registration Number: 74655-21  
Application Date: October 6, 2017  
Decision Number: 534980

Dear Ms. Ingram:

The amended label referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide and Rodenticide Act, as amended, is acceptable. This approval does not affect any conditions that were previously imposed on this registration. You continue to be subject to existing conditions on your registration and any deadlines connected with them.

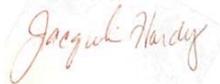
A stamped copy of your labeling is enclosed for your records. This labeling supersedes all previously accepted labeling. You must submit one copy of the final printed labeling before you release the product for shipment with the new labeling. In accordance with 40 CFR 152.130(c), you may distribute or sell this product under the previously approved labeling for 18 months from the date of this letter. After 18 months, you may only distribute or sell this product if it bears this new revised labeling or subsequently approved labeling. “To distribute or sell” is defined under FIFRA section 2(gg) and its implementing regulation at 40 CFR 152.3.

Should you wish to add/retain a reference to the company’s website on your label, then please be aware that the website becomes labeling under the Federal Insecticide Fungicide and Rodenticide Act and is subject to review by the Agency. If the website is false or misleading, the product would be misbranded and unlawful to sell or distribute under FIFRA section 12(a)(1)(E). 40 CFR 156.10(a)(5) list examples of statements EPA may consider false or misleading. In addition, regardless of whether a website is referenced on your product’s label, claims made on the website may not substantially differ from those claims approved through the registration process. Therefore, should the Agency find or if it is brought to our attention that a website contains false or misleading statements or claims substantially differing from the EPA approved registration, the website will be referred to the EPA’s Office of Enforcement and Compliance.

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Your release for shipment of the product constitutes acceptance of these conditions. If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA section 6. If you have any questions, please contact Tom Luminello by phone at (703) 308-8075, or via email at [luminello.tom@epa.gov](mailto:luminello.tom@epa.gov).

Sincerely,

A handwritten signature in red ink that reads "Jacqueline Hardy". The signature is written in a cursive style and is positioned above the typed name.

Jacqueline Hardy, Product Manager (34)  
Regulatory Management Branch II  
Antimicrobials Division (7510P)

Enclosure Stamped Label

# BIOSPERSE™ 244M microbiocide

## ACTIVE INGREDIENTS:

2,2-dibromo-3-nitrilopropionamide .....20.0%

INERT INGREDIENTS\*.....80.0%

TOTAL.....100.0%

\*Inert ingredients includes solubilizing and dispersing agents.

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EPA Est. No.

Lot#

Solenis LLC

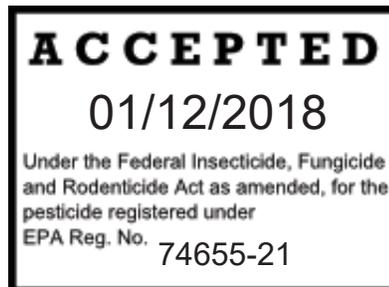
500 Hercules Road

Wilmington, DE 19808

(302) 594-5000

Emergency Phone Number

1-844-SOLENIS (1-844-765-3647)



## KEEP OUT OF REACH OF CHILDREN

## DANGER

### FIRST AID

**IF IN EYES:** Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing. Call a poison control center or doctor for treatment advice.

**IF ON SKIN:** Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.

Have the product container or label with you when calling a poison control center or doctor or going for treatment.

**IF INHALED:** Move the person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible.

Call a poison control center or doctor for further treatment advice.

**IF SWALLOWED:** Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give anything by mouth to an unconscious person.

**NOTE TO PHYSICIAN:** Probable mucosal damage may contraindicate the use of gastric lavage.

**IN CASE OF EMERGENCY CALL 1-844-SOLENIS (1-844-765-3647)**

### FOR INDUSTRIAL USE

Made in USA

Produced for Solenis LLC

### PRECAUTIONARY STATEMENTS

#### HAZARDS TO HUMANS AND DOMESTIC ANIMALS

**CORROSIVE:** Causes irreversible eye damage. May be fatal if inhaled or swallowed. Causes skin irritation. Do not get in eyes, on skin or on clothing. Do not breathe dust. When loading or handling wear protective eyewear (goggles or face shield), long-sleeved shirt and long pants, socks, shoes, chemically resistant gloves and a NIOSH approved respirator. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the bathroom. Remove and wash contaminated separated from other before reuse.

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**PERSONAL PROTECTIVE EQUIPMENT** - Applicators and other handlers must wear:

- \* coveralls over long-sleeved shirt and long pants,
- \* socks and chemical-resistant footwear,
- \* goggles or face shield, and
- \* chemical resistant gloves (such as barrier laminate or butyl nitrile/neoprene rubber, PVC, or viton).
- \*NIOSH approved respirator

**ENGINEERING CONTROLS** - When handlers use closed metering systems the handler requirements may be reduced or modified to long-sleeve shirt, long pants, shoes and socks.

**USER SAFETY INSTRUCTIONS** - Users must wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet. Users must remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. Users must remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

**ENVIRONMENTAL HAZARDS** - This pesticide is toxic to fish and invertebrates. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans or other waters unless in accordance with the requirements of a National Pollutant Discharge Elimination System (NPDES) permit and the permitting authority has been notified in writing prior to discharge. Secondary biological treatment of DBNPA effluent is required for all uses except for use in secondary oil recovery systems. Do not discharge effluent containing this product to sewer systems without previously notifying the local sewage treatment plant authority. For guidance contact your State Water Board or Regional Office of the EPA.

**APPLICATION RESTRICTIONS** - Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application.

## **STORAGE AND DISPOSAL**

Do not contaminate water, food, or feed by storage or disposal

**PESTICIDE STORAGE:** Avoid dilution with water. To maintain product quality, store at temperatures below 60°C. Keep container tightly closed when not in use.

**PESTICIDE DISPOSAL:** Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance. Do not reuse empty container.

**CONTAINER HANDLING:** Nonrefillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Offer for reconditioning, if appropriate.

**FOR CONTAINERS GREATER THAN 5 GALLONS:** Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container ¼ full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times.

**FOR CONTAINERS UP TO 5 GALLONS:** Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after flow begins to drip. Repeat this procedure two more times.

## **DIRECTIONS FOR USE**

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. The dosage of this product required for any specific application will depend upon a number of factors including: the nature and extent of microbiological contamination, the type and volume of the system being treated, the degree of control desired, and retention time in the system. Where necessary, your Solenis Representative will arrange for microbiological and chemical analysis, so that technical advice can be given concerning specific site problems.

**BREWERY PASTEURIZER WATER** - For controlling (or inhibiting) the growth of bacteria, fungi and yeasts in brewery pasteurizing water systems, add this product at a point in the system to ensure uniform mixing.

Initial or Slug Dose: When the system is noticeably fouled, add this product at the rate of 0.25 gal (2.65 lbs) per 1000 gals of water in the system. Repeat until control is achieved. Subsequent Dose: When microbial control is evident, add this product at the rate of 0.1 to 0.2 gal (1.06 to 2.12 lbs) per 1000 gals of water per day, or as needed to maintain control. Additions of this product can be made continuously or intermittently. Slug the system as required. Badly fouled systems must be cleaned before treatment is begun.

**METALWORKING FLUIDS CONTAINING WATER** - This product is effective in metalworking fluid concentrates which have been diluted in water at ratios of 1:100 – 1:4. For controlling (or inhibiting) the growth of bacteria, fungi and yeasts that may deteriorate metalworking fluids containing water, add this product to the fluid in the collection tank. Additions must be made with a metering pump.

INITIAL OR SLUG DOSE: When the system is noticeably fouled, add 32 fluid ounces (250 ppm) this product per each 1000 gallons of metalworking fluid in the system. Repeat until control is achieved.

SUBSEQUENT DOSE: When microbial control is evident, add 12.8 to 25.6 fluid ounces (100 to 200 ppm) this product per each 1000 gallons of metalworking fluid per day, or as needed to maintain control. Additions can be made continuously or intermittently. Slug feed the system as required. FEEDING: This product may be fed directly from the drum or diluted with water and fed by any suitable feed system. This product must be dosed directly into the sump or basin or any other location where good distributions can be assured. When required, your Solenis Representative will arrange for microbiological and chemical analyses and offer technical advice concerning your specific problems.

**RECIRCULATING WATER COOLING TOWERS AND EVAPORATIVE CONDENSERS** - Dosages for industrial recirculating water cooling towers will depend on the condition of the system prior to the initiation of treatment. Heavily contaminated systems must be cleaned prior to treatment. Apply this product to the cleaned system or when growth is first noticed according to the following schedule:

**BACTERIAL AND FUNGAL CONTROL:**

INTERMITTENT OR SLUG FEED METHOD - Initial Dose: When the system is noticeable fouled, add 0.6 to 1.2 fluid ounces (6 -12 ppm) this product per each 1000 gallons of water in the system. This dose may be repeated once, twice, or three times weekly or as required to control the growth of slime forming organisms. Subsequent Dose: When microbial control is evident, add 0.3 to 1.2 fluid ounces (3 -12 ppm) this product per each 1000 gallons of water in the system every four days, or as needed to maintain good control. CONTINUOUS FEED METHOD - Initial Dose: When the system is noticeable fouled, add 0.6 to 1.2 fluid ounces (6 -12 ppm) this product per each 1000 gallons of water in the system. Subsequently, maintain this level by pumping a continuous feed of 0.12 to 0.6 fluid ounces (1.2 to 6 ppm) this product per each 1000 gallons of water in the system lost by blowdown.

**ALGAL CONTROL:**

INTERMITTENT OR SLUG FEED METHOD - Initial Dose: When the system is noticeably fouled, add 6.0 to 12.0 fluid ounces (60 - 120 ppm) this product per each 1000 gallons of water in the system. Repeat until control is achieved. Subsequent Dose: When algal control is evident, add 4.0 to 12.0 fluid ounces (40 -120 ppm) this product per each 1000 gallons of water in the system or as needed to maintain control.

CONTINUOUS FEED METHOD - Initial Dose: When the system is noticeably fouled, add 6.0 to 12.0 fluid ounces (60 to120 ppm) this product per each 1000 gallons of water in the system. Subsequent Dose: Maintain this treatment level by pumping a continuous feed of 4.0 to 12.0 fluid ounces (40 to120 ppm) this product per each 1000 gallons of water in the system.

**PULP AND PAPER MILL SYSTEMS –**

**NOTE:** Add this product separately to the system. Do not mix it with other additives, so as to avoid decomposition of this product due to the high pH of many additive formulations.

For the control of slime-forming bacterial, fungal, and yeast growth in pulp, paper and paperboard mills add this product at levels of 0.15-0.50 lb/ton (dry) of pulp or paper produced. Addition can be continuous or intermittent, depending upon the type of system and the severity of contamination. Addition is via a metering pump at a point in the system that will ensure uniform distribution of this product in the mass of fiber and water, such as the beaters, Jordan inlet or discharge, broke chests, furnish chests, save-alls and white-water tanks.

**Heavily fouled system** must first be boiled out, then treated with 0.15-0.35 lb. of this product /ton (dry) of paper or pulp as necessary for control.

**Moderately fouled systems** must be treated continuously with 0.35-0.50 lb. of this product /ton(dry) of paper or pulp until the slime accumulation is controlled. Subsequent rates can then be reduced to 0.15-0.35 lb. of this product /ton (dry) of paper on a continuous or intermittent basis as needed for control. Dislodged slime may cause breaks in the paper and a clean-up of the paper machine may be advisable.

**Slightly fouled systems** must be treated continuously with 0.15-0.35 lb. of this product /ton (dry) of paper or pulp, until the slime is controlled, then added on an intermittent basis to maintain control.

**SLIMICIDE APPLICATIONS** - This product is effective in controlling the growth of slime-producing microorganisms which affect the production of paper and paperboard by causing breaks or spots. Dosage will vary from 0.15 to 2.0 pounds of this product per ton of dry paper or paperboard products. Dosage depends on the type of stock, complexity of the system, quality of raw water and type and degree of contamination. This product may be drip fed continuously from the drum or fed by any suitable chemical feed system. Feed points include the hydropulper, machine chest or broke system.

**AIR WASHER SYSTEMS** - Add 0.15 to 3.07 fluid ounces (1.5 to 24 ppm) this product per each 1000 gallons of water in the system, depending upon the severity of contamination to control slime forming bacteria and fungi in industrial air washer systems.

**INTERMITTENT OR SLUG FEED METHOD** - Initial Dose: When the system is noticeably fouled, add 0.3 to 12.0 fluid ounces (3.0 to 120 ppm) this product per each 1000 gallons of water in the system. Repeat until control is achieved. Subsequent Dose: When microbial control is evident, add 0.0012 to 0.047 gallons (1.5 – 60 ppm) this product per each 1000 gallons of water in the system or as needed to maintain control.

**CONTINUOUS FEED METHOD** - Initial Dose: When the system is noticeably fouled, add 0.0023 to 0.095 gallons (3.0 to 120 ppm) this product per each 1000 gallons of water in the system. Subsequent Dose: Maintain this level by pumping a continuous feed of 0.0015 to 0.047 gallons (1.5 to 60 ppm) this product per each 1000 gallons of water in the system.

**NOTE:** For use only in industrial air washer systems that contain effective mist eliminating components.

**CONSUMER, HOUSEHOLD AND INSTITUTIONAL PRODUCTS** - This product may be used to reduce microbiological contamination in process water and raw materials used to make consumer, household and institutional products. Add directly to the water at a concentration of 125-1,000 ppm by wt. To reduce microbial contamination in formulated products such as detergents, polishes and cleansers, add 125 – 250 ppm by wt. of this product directly to the product prior to packaging and mix thoroughly.

#### **INDUSTRIAL PRESERVATION: PAINTS & COATINGS, SLURRIES, ADHESIVES, EMULSIONS, CAULKS**

This product is used to reduce microbiological contamination in process water and raw materials during the formulation phase or be added directly to the final formulated product to reduce contamination prior to packaging of formulated water based products such as paints and coatings, slurries, adhesives, emulsions and caulks. Do not mix with other additives prior to addition in order to avoid decomposition. Typical use levels for these applications are 25 to 2,000 ppm by wt. This is equivalent to 2.8 to 224.0 fluid ounces this product per 1,000 gallons or 21.4 to 1,712.0 milliliters this product per 1,000 liters. The required concentration will depend on the material being treated and the level of contamination present.

**PRESERVATIVE APPLICATIONS** - Many aqueous systems require protections against microbial degradation which may result in changes in physical properties or performance characteristics such as pH drift, viscosity and color variations and foul odor emissions. This product will effectively protect paints and coatings, adhesives and animal glues, latex, inks, paper coatings and mineral slurries when used at a dosage level of 0.05 – 1.00%. Cutting fluids and other metal-working fluids are generally protected with 0.1 – 0.5%. This product is also an effective preservative useful in controlling bacterial and fungal growths in drilling muds, gypsum muds, packer fluids and underground flood water. Treatment levels are 0.005 – 1.0% by weight per barrel of mud or packer fluids and 10 – 500ppm in underground flood water. With any preservative application, this product must be added as early as possible to the system and should be added where there is good agitation. Good housekeeping and protection of raw materials will aid in the effectiveness of the preservative.

**ENHANCED OIL RECOVERY SYSTEMS** - For controlling slime forming bacteria, sulfide producing bacteria, yeasts, and fungi in oil field water, polymer or mycellar floods, water disposal systems, or other oil field water systems, add 1 – 80 ppm, this product (0.08 to 6.4 gallons this product per 2400 barrels of water) depending on the severity of contamination. Additions must be made with a metering pump either continuously or intermittently.

**INTERMITTENT OR SLUG FEED METHOD** - When the system is noticeably fouled, or to maintain control of the system, add 10 – 80 ppm this product (0.8 to 6.4 gallons this product per 2400 barrels of water) intermittently for 4 – 8 hours per day, and from 1 – 4 times per week or as needed depending on the severity of contamination. Addition of this product must be made at the free water knockouts, before or after the injection pumps and injection well headers.

**NOTE:** For control of bacteria, yeast, and fungi in aqueous solutions of biopolymer (xanthan gum) used in flooding operations, add 15 – 80 ppm this product (1.2 – 6.4 gallons this product per 2400 gallons of water). Additions of this product must be made with a metering pump immediately after preparation of the aqueous biopolymer solution to prevent loss of viscosity.

**CONTINUOUS FEED METHOD** - When the system is noticeably fouled, add 10 – 80 ppm this product (0.8 – 6.4 gallons this product per 2400 barrels of water) continuously until the desired degree of control is achieved. Subsequently, treat with 1 – 15 ppm this product (.08 – 1.2 gallons this product per 2400 barrels of water) continuously, or as needed to maintain control.

**PUBLICLY-OWNED TREATMENT WORKS  
TO CONTROL COLIFORM AND OTHER BACTERIA**

Add this product at a concentration of 1.0 to 10.0ppm by weight of water being treated, depending on the severity of contamination in the system. Addition should be CONTINUOUS and must be made with a metering pump at a point in the system where mixing will be rapid and thorough. Add this product to the system in a location where contact time will be 30 minutes or greater before reaching the outfall.

**TO USE AS A CO-TREATMENT WITH CHLORINE**

Add 0.4-1.5ppm this product by weight of water treated. Chlorination must result in a minimum detectable residual (i.e., greater than zero but less than the NPDES permit level). Addition must be CONTINUOUS and made at a point just after initial chlorine mixing. Rapid mixing is necessary for maximum effectiveness. This product must be added at a location where a contact time of 10 minutes or longer will be provided before reaching the outfall.

**MEMBRANE SYSTEMS FOR INDUSTRIAL WATER – *Not approved for use in California***

This product is used to control bacteria and reduce biofouling in various membrane system types (reverse osmosis, ultrafiltration, nanofiltration, and microfiltration) used for industrial water processing. Acceptable applications include reverse osmosis for the production of boiler make-up water, electronic component rinsing, and industrial wastewater treatment.

**NOTE: Reverse Osmosis (RO) concentrate streams must not be discharged to lakes, streams, ponds, estuaries, oceans or other waters unless in accordance with the requirements of a National Pollutant Discharge Permit (NPDES). Discharge of RO concentrate streams to sewer systems may require approval of the local sewer treatment plant authority. For guidance contact your State Water Board or Regional Office of the EPA.**

This product must be added to the RO feed water at a rate of 1 to 100ppm based on the feed water flow rate (0.1 to 10 fl oz/min per 1000 gallons/min. feed water, or 0.8 to 80 mls/min per cubic meter/min of feed water). Apply product to the service cycle feed water on a regular basis using an addition cycle of at least 30 minutes. The frequency of addition may be daily or as necessary in order to maintain RO productivity performance. For highly fouled systems, a 100ppm dosage must be applied each day for several hours until the system performance has recovered.

**NOTE: Do not add this product in the presence of sodium bisulfite or other reducing agents which are being added to the feed water of the membrane system. In some situations the addition of any reducing agents must be suspended for at least 15 minutes prior to the addition of this product in order to avoid neutralization and deactivation of the active ingredient.**

This product can be added to the feed tank used of an off-line chemical cleaning procedure. Addition must be at a rate of 20 to 200ppm based on the total amount of solution in the feed tank (2 to 20 fl oz per 1000 gallons, or 16 to 160 mls. per cubic meter). Following the complete transfer of feed solution, re-circulate or soak for 1 to 3 hours to ensure sufficient contact for all RO membrane modules with the DBNPA solution. Frequency of addition must be every 5 days or as needed.

**NOTE: Add this product separately to the feed tank system. Do not mix with other chemical additives as this may result in rapid decomposition of this product due to the high pH of many additive formulas. It is important to thoroughly rinse the feed tank system so it is free of any high pH chemicals prior to introducing this product.**

NOTE: Buyer assumes all responsibility for safety and use not in accordance with directions.

mmyy [where mm is two numerical digit month and yy is two numerical digit year to be used to identify label version]

[Note to reviewer: information in [ ] will not appear on marketplace label]